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MONTANA DEPARTMENT OF FISH AND GAME

DRAFT ENVIRONMENTAL STATEMENT

ADDENDUM NUMBER ONE TO

PROJECT NO. FG-22

ANNUAL STATEWIDE HARVEST OF BIG GAME ANIMALS

Prepared in Accordance with
Environmental Impact Statement Requirements,
State and Federal

July 2, 1975

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ADDEND

ENVIRONMENTAL IMPACT STATEMENT
ON THE SPORT HUNTING OF THE GRIZZLY BEAR
Addendum to 1972 EIS on Statewide Big Game Hunting Seasons

by

The Montana Department of Fish and Game

I. Purpose

Several wild and free-ranging grizzly bear (Ursus arctos horribilis) populations exist in Montana. They present an unusual challenge to resource managers because they are at the same time a "threatened" species under the proposed rules of the federal Endangered Species Act (1973), a Montana big game animal, a predator of livestock, and a possible threat to human beings.

Their habitat in Montana is managed by the U. S. Forest Service, the National Park Service, the Blackfeet and Flathead Indian tribes, the Montana Department of Natural Resources and Conservation, and various large private land holders.

The animals, however, are managed by the Montana Department of Fish and Game, the two Indian tribes, and the National Park Service. For those animals under state jurisdiction, the intent of the Montana Department of Fish and Game is to ensure the survival of viable grizzly bear populations, to manage them for their greatest value to the people and visitors in Montana, to reduce conflict between bears and livestock interests, and to minimize their danger to man.

II. Description of Proposed Action

The grizzly bear is among the big game species authorized by the State Legislature for the Montana Fish and Game Commission to manage for the welfare of the species. Management of viable populations includes an annual harvest of big game animals (Mont. EIS, 1972).

The Montana Fish and Game Commission's grizzly bear policy is, in part, "...to perpetuate and manage this unique wildlife species in suitable habitat of the state for the people of Montana" (and the nation). With good evidence that viable populations are present in Montana, and that grizzlies are a species requiring special consideration, "hunting seasons and regulations shall be based upon management experience and research findings concerning this bear."

Grizzly seasons are concurrent with other big game species, principally elk, in certain hunting districts of the state, but with specific grizzly regulations. A double license is required (for both hunting and possessing of a grizzly), and the hunting license may not be purchased after July 1. Additional regulations require reporting of the kill, presenting the hide and head for tagging, and temporarily relinquishing the head to the state for studies. Information obtained in this manner, along with other field data, provide management guidelines for the following year.

In 1975 the season on grizzly bears will be open in ten hunting districts. This season will close on 48-hour notice when the total number of grizzly bears killed (for any reason) or otherwise removed from the wild population in Montana by humans, has reached 25. In compliance with the recommendations of the NAS report, no grizzly bear seasons will be in effect in the five hunting districts adjacent to Yellowstone National Park during 1975 and 1976.

III. Description of the Existing Environment

Grizzlies are present in Montana in two general areas: the northwestern portion of the state west of Great Falls and north of Missoula, and in southwestern Montana adjacent to Yellowstone National Park. Their range includes state and federal government lands, including Glacier and Yellowstone National Parks, wilderness areas, other wild lands, Indian reservations, and private lands.

A. Human Resources

In the primary grizzly bear habitats of Montana, concurrent use of the land by people varies from incidental and intermittent, to that of year-round habitation (ranches, communities, and towns). These activities by man do occasionally conflict with the bears.

Depending upon the circumstances and the individuals involved, grizzly and human conflicts have occurred in the past and will likely continue in the future, but at a statistically low rate. Encounters with grizzlies do not always constitute a conflict, but are considered by some persons as a memorable experience. And gradually owners or custodians of grazing livestock in known grizzly habitats are moderating their view that the presence of any bear is incompatible with their livestock. This new, and more realistic view, is that grazing permits on federal lands are a privilege, and the loss of livestock on federal grazing lands is an acknowledged risk included in the privilege.

In areas of marginal or disturbed grizzly habitat, however, people and the activities of man are far more common. Examples are the heavily logged areas of the Whitefish Range and the Swan Valley, the farming land along the foothills of the Mission Mountains and the Continental Divide west of Great Falls, and the human occupancy along the North Fork of the Flathead River.

The various forms of conflict or interaction between bears and man in these marginal and disturbed areas include hunting, inadvertent disturbance of bears, habitat destruction, attacks on livestock, and destruction of property.

In both of the situations described above, however, the grizzly bear has various meanings to the people involved. Several views, values, and standards may be individually or collectively attached to a single circumstance. To different persons, a grizzly may mean adventure; a species to be maintained at maximum densities; part of the western mountain wilderness concept; a coveted big game trophy; a species that cannot be tolerated; a potential threat to life, livestock, or property; and many other personal images.

It is vitally necessary to the destiny of grizzly bears in Montana, therefore, that the public be convinced to reevaluate their opinions and the values they attach to the grizzly bear. Man's role in grizzly domain will determine whether the species shall survive, but experience has shown that simple solutions and blanket rules will not be the means to this goal.

B. Physiography and Geology

The western third of Montana is comprised of the Rocky Mountains, with interspaced mountain valleys. Geologic features have been described earlier (Mont. EIS, 1972).

C. Land Use and Ownership

Grizzly habitat is used for farming, ranching, grazing, timber, watershed management, wildlife habitat or recreation. Much of the habitat is under Forest Service control. Outside of wilderness, it is used for grazing as well as timber and watershed management (Mont. EIS, 1972).

D. Wildlife

The overall mountain habitat for grizzlies includes heavy timber, stream bottoms, burns, alpine meadows, rock slides and tundra. Food requirements are principally grasses and sedges, bulbous roots, carrion, berries, nuts, forbs, small mammals and a variety of additional edibles.

E. Vegetative Resources

Forests and alpine grassland (Mont. EIS, 1972).

F. Climate

Grizzlies are seasonally active from April through November, but usually remain concealed in dens during the winter.

G. Transportation Systems

Certain grizzly bear hunting districts are more accessible by road, but some areas can be traveled only on foot or by horse. The best hunting areas, the divides and the areas above the tree lines, have few roads or trails.

IV. Evaluation of Environmental Impact

A. Environmental Impact of Proposed Action

1. The principles of game management have proven valid over many decades of game research and management in North America. There is no reason, at present, to suspect that these principles should not be applied to remove surplus animals from the Montana grizzly population on a sustained basis, at no detriment to the species.

2. Northwestern Montana grizzly populations will have seasons in selected hunting districts. The legal kill by hunting will be added to other man-caused losses to not exceed a total quota of 25. The quota of 25 is well below the known mortalities of the previous eight years (Greer, 1972, 1975), and so far as is known, this level of kill is well within the replacement rate for the bears of this area.

3. Hunting of animals which aggressively compete with man for resources and space may have the beneficial effect of making them wary. In the case of the grizzly, this embodies considerable spin-off by making the bears wary of hikers, loggers, campers, fishermen, etc., as well as of the hunters, a net benefit in the welfare of the species.

4. Even with annual hunting seasons, there have been nuisance and marauding bear incidents that require control actions (i.e., killing or removal) each year. Such complaint actions require minimal time and manpower, but also involve risk to the public and to departmental personnel. In some cases, a helicopter is required in addition to vehicles, traps, special equipment, etc. Direct and indirect costs therefore range from \$50 to \$900 per grizzly capture. Carefully managed hunting can be assumed to keep this cost and risk at a level tolerable to the state and to the local people involved.

5. Hunting of grizzlies also provides a high level recreational hunt to those wishing to participate, and is fully within their rights under present regulations. Hunting is a heritage that may be passively or actively pursued and enjoyed. The reasons for hunting are as varied as the people who participate, or who assist those who participate. The values and benefits derived by this pastime are great to a large segment of the Montana population. The primary benefits, however, accrue to the wildlife themselves since their only representation or real hope for the future is financed by sportsmen and usually sportsmen alone.

B. Adverse Environmental Effects Which Cannot Be Avoided.

1. Hunting may make grizzlies less easy to observe than if they were not hunted, and this would be detrimental to the casual photographer or tourist.

2. Vehicles use basic energy resources that are irrecoverable; exhaust gases contribute to air odors and impurities, and the vehicles have noise levels above those present in the wild. Vehicles, horses, and foot travel may increase soil erosion in some instances. Careless campfire or smoking habits of grizzly bear hunters may result in fire damage, and some vegetation disruption may be associated with hunting (Mont. EIS, 1972).

3. A few accidental grizzly deaths, or deaths of other animals, may occur with the live trapping program required to document population levels, productivity, etc.

C. Alternatives

1. Destruction by state or federal employees of bears which cause damage or injuries. Regulated hunting apparently has not overexploited or depleted grizzly populations. Under these conditions, several incidents of marauding or nuisance grizzlies have occurred annually during the spring, summer and autumn.

2. Have a limited permit season. In effect, limiting the number of grizzly bear hunters, rather than the number of bears killed. This would defeat the goal of having sufficient hunters in the field to make bears wary, and probably would not achieve an adequate kill of surplus bears (because the hunting success is so low). A quota on the number of bears killed is much more direct and manageable. It would also limit the number of sportsmen able to participate in the hunt, depriving them of benefits that accrue even to unsuccessful hunters.

3. Close all grizzly bear seasons. With the elimination of hunting, it is predictable that the surplus grizzlies could be involved in incidents and conflicts with man at a greater rate, and that as many or more grizzlies could become casualties, especially in areas where sheep and livestock grazing permits are authorized. Illegal killing can be increased easily and without detection in rugged back country, ultimately defeating this approach in any case. Furthermore, this action would possibly encourage the illegal traffic of grizzly pelts, claws, teeth, or heads. The current "hearsay" values range from \$200 for claws to \$2,500 for hides. Most important, it would lead many individuals genuinely concerned in the bear's welfare to the erroneous conclusion that the bear is secure. This misconception can only reduce opposition to destruction or encroachment on bear habitat.

4. Capture all troublesome grizzlies and:

a. Give them to zoos. This action has been explored to the fullest. Zoos generally do not want nuisance grizzlies unless they have a trading value with other zoos. Cubs and yearlings are generally sought more, but in fact most zoos already have sufficient grizzlies from previous donations and from successful reproduction among their confirmed animals.

b. Translocate to former ranges. Preliminary investigations indicate that no former grizzly ranges are suitable for reestablishment. State policy requires adjacent and nearby landowner written approval for relocations. Because home ranges of introduced animals may vary from the expected, and result in depredation complaints or injury to people, the entire approach is fraught with uncertainties.

Any such attempts at reintroduction should therefore be based on a long-term, careful study program. In the past, all western states have been offered grizzlies for their mammal fauna, but none have accepted.

c. Relocation of bears to authorized areas. Nearby areas are often available within or adjacent to the home ranges of troublesome grizzlies. This has been a temporarily effective method in the past, and can be improved upon in the future, but is not a good, long-term solution. Economic cost per individual bear can become significant, and often naturally injured (less desirable) grizzlies are involved. The known survival rate of grizzly bear transplanted out of Yellowstone National Park has been extremely poor (Greer, 1974).

D. Short Term -- Long Term Use

In the past five years there have been more incidents of problem grizzlies than in prior years. Increasing human populations in grizzly habitats are the probable cause, and can be expected in the future to cause even more problems between man and bears. These short-term events, therefore, may develop into long-term problems and programs, perhaps to the detriment of the bears, unless the increase in human activities can be restricted to the marginal habitat.

The present annual quota of 25 grizzlies may or may not permit adequate cropping to reduce emigration of subadults into peripheral habitats. This figure must be modified as conditions (and data) dictate.

Roads which provide too easy access into prime grizzly habitat will probably have to be closed, and certain timber harvest programs modified. Long-term population, habitat, recreation, and land-use studies will be required to determine the proper levels of long-term use which will allow us to maintain the present habitats and existing viable grizzly populations. Other agencies, organizations and individuals will have to share this concern, and work in a coordinated effort, if long-term use is to be compatible with maintenance of the species.

E. Irreversible and Irretrievable Commitment of the Resource.

Several stable, free-ranging grizzly populations are present in Montana, and they depend primarily upon the quality and quantity of their present habitats.

Present levels of killing or removal of grizzly bears are apparently not resulting in any irreversible commitment of the resource. And because these levels of removal can be regulated on an annual or even shorter time basis, should new data become available, the management program poses no threat to the species. In fact, more precise management should be of benefit to the species.

On the other hand, the slow and steady destruction of grizzly habitat through "land development" programs, especially logging, clear-cutting in key areas, plus the associated roadbuilding, hauling and clean-up, can make bears more vulnerable to hunters or may disrupt the ranges and social hierarchies of bears (Kemp, 1974). Recreational developments in grizzly habitat can also be a negative value (i.e., habitat loss) to the bear (Jonkel, 1975). Such action may in fact set irreversible trends detrimental to the bears.

The same may be true for federal intervention as a result of pressure by anti-hunting conservation groups. Such action may dictate "over-conservative" hunting quotas. Such mismanagement could lead to an irretrievable loss in professional and public credibility, especially with local people who are acquainted first-hand with the situation, and to extraordinary methods in an attempt to stabilize various populations (such as happened in Yellowstone National Park). When management becomes a political and courtroom issue, or a matter of personal differences, the resource (in this case, grizzlies) will be the ultimate loser.

F. Discussion of Problems and Objections by Other Agencies or the Public.

The general public has various levels of knowledge and opinion about grizzly bears: their ecology, biology, behavior, population structure, and the annual mortality, including both regulated and unrestricted hunting. Questionnaires sent to each of the 2,600 grizzly bear hunters of the past three years indicate a high level of knowledge, respect, and consideration of the grizzly and its future. Some hunters' comments on the current grizzly seasons include: the possibility of overkill in some areas; earlier seasons in more hunting districts; a spring hunting season; the use of dogs or baits; a limit of one grizzly per lifetime; a season in additional districts; and the elimination of nonresidents from hunting.

As a land management agency, the U. S. Forest Service has also established a new approach to some of the paramount problems (roading, logging, grazing, etc.) that may be associated with the welfare of the grizzly. Meetings with the Forest Service and other agencies concerning grizzly habitat have been very productive, and they would improve their management practices even more if they were provided with adequate guidelines.

Stockmen's groups take strong public and political stands on predators which kill their livestock. They support the hunting of predators and have frequently requested the trapping or poisoning of marauding grizzlies, or taken unilateral action to quietly exterminate problem animals. Some individual stockmen, however, are developing a genuine concern for the bear and endure occasional losses philosophically.

V. A Summary Statement

The intent of this EIS is to examine the possible effects of grizzly bear seasons on the environment in Montana, to explore the reasonable alternatives, and to make the information available to the public.

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Dr. Charles J. Jonkel is a visiting professor of wildlife biology and research associate at the University of Montana at Missoula. He is presently in charge of a border grizzly bear research program in northwestern Montana.

Dr. Jonkel has gained national acclaim for his research on both black and polar bears. In addition, he has worked with musk oxen, arctic wolves and marine mammals.

Dr. Jonkel holds a BSc from Montana State University, 1957; MSc from Montana State University, 1959; and a PhD from the University of British Columbia, 1967. His experience includes: research biologist, Montana Department of Fish and Game, 1959-63; research scientist for the Canadian Wildlife Service; and acting supervisor of mammal research, Canadian Wildlife Service. Dr. Jonkel is a member of the Provincial Polar Bear Committee, IUCM polar bear specialists, chairman pro tem of a grizzly bear group and associate editor of the Canadian Field Naturalist. He is also a member of the American Wildlife Society, American Society of Mammalogists, and American Institute of Biological Sciences.